

HE UNITED STATES PATENT AND TRADEMARK OFFICE

Date: January 12, 2004

In re application of:

GreggMotsenbocker

Appl. No:

09/678,619

Filed: For:

October 2, 2000

Compositions and Methods for

Releasing Adherent Deposits from

Surfaces and Substrates

Commissioner of Patents and Trademarks Alexandria, VA 22313

PECEIVED TO 1700 Examiner: Gentle E. Winter Group Art Unit: 1746

Declaration Under 37 CFR 1.132

GreggA. Motsenbocker declares that:

- 1. He is the sole inventor of and is familiar with the present US Patent Application Number 09/678,619 filed October 2, 2000, entitled Compositions and Methods for Releasing Adherent Deposits from Surfaces and Substrates, and is familiar with the Office Action dated July 17, 2003 that has prompted this declaration and associated Amendment.
- 2. Under his direction and control, a new cleaning solution was invented to address certain requirements of the Environmental Protection Agency (EPA) and the California EPA with respect to chemicals used for cleaning as well as to provide a substantially improved cleaning solution that clean multiple substrates. Refer to the attached Exhibit A, page 2, for a table showing the expected maximum Volatile Organic Compound (VOC) requirements and their application to various cleaner types. Note that the most stringent future requirement, maximum 3%VOC for non-aerosol carpet and upholstery cleaners, is met by the present invention, which has essentially zero VOCs.
- 3. The subject application describes a low-VOC cleaning solution to be used in combination with other substrate-specific or stain-specific cleaners. The use of a LightHydrotreated Petroleum

Distillate (LHPD) as a replacement for kerosene or other petroleum distillates to reduceVOCs is the key advance in the present invention and produces non-obvious effects, as will be shown below.

- 4. The LHPD selected is Calumet, a commercially-available HPD. It's primary feature is that it qualifies as a zero VOC carrier solvent of the cleaning solution composition. Kerosene, which Calumet replaces as a carrier solvent, has highVOC content and will be EPA and California Proposition 65 non-compliant in future years. Using Calumet in combination with other compounds, the inventor has produced a cleaning solution that has improved features as well as a cleaning solution that meetall current and future EPA restrictions. The inventor is informed and believes that state-of-the-art cleaners do not now meet future EPA requirements for VOCs.
- 5. In addition to EPA compliance, the inventor has achieved a breakthrough in cleaning technology by combining anLHPD with other compounds to produce a <u>single</u> purely solvent-based formulation that is VOC compliant and can be applied to all surfaces (Exhibit A page 3). Previous formulations in the art that were effective cleaning hard surfaces would destroy cloth that they were applied to. The new formulation is also California Proposition 65 compliant for carcinogens and meet: SARA Title 313.
- 6. The inventor's attempt to produce a replacement product for his well-received Motsenbocker's Liftoff cleaners that would be VOC compliant in the future produced some unanticipated benefits. For example, the combination of anLHPD with an acetal, ketal, or or tho ester produces a composition for cloth cleaning that dries after use without leaving a greasy residue or decolorizing the fabric. This is a non-obvious result because kerosene-based cleaners do leave such deposits. Use of an LHPD to obtain VOC compliance under EPA guidelines would not lead a persor skilled in the art to expect the additional benefit of residue elimination in combination with other compounds. Also note that an LHPD by itself or one of the esters by itself, or any other single

compound or combination, does not produce this result. By performing the research to reduce VOC in surface cleaners the inventor discovered a new combination of compounds that reduced surface deposit ordinarily left by cleaners to practically zero.

- 7. Ultimately, the use of kerosene as a carrier solvent in a surface cleaner does not anticipate th use of LHPD as a carrier solvent in the present invention because no combination of component chemicals including kerosene as a carrier solvent can produce the same effects as a surface cleaner as the present invention. The low VOC characteristics cannot be met with kerosene, the lack of a surface deposit after applying the cleaner cannot be met, and the use of a single cleaner for multiple surfaces cannot be met. One may look at kerosene as a very polluted, high VOC compound that uses LHPD as a base solvent and adds several undesirable compounds to it that have to be compensated for with the final cleaner formulation. Using LHPD as a carrier solvent is the best starting point, then the right compounds can be added to it to make the best possible surface cleaner.
- 8. The combination of chemicals as described above have been successfully sold and used to remove stains that cannot be removed by other means without affecting the substrates being cleaned and said combination also meets or exceeds all present and proposed future requirements for toxicity set by governmental units. It is not obvious from the teachings of the data sheet for kerosene that a distillate of kerosene such as used in this combination would have such properties or meet the necessary requirements in combination with other chemicals or by itself.

9. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fin or imprisonment or both under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

GreggA. Motsenbocker

Date: 1-13-04